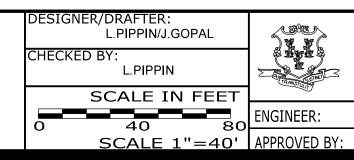
# SUBSET 04 - STRUCTURE INDEX OF DRAWINGS

DRAWING TITLE	DRAWING NUMBER	DRAWING TITLE
INDEX OF DRAWINGS		
GENERAL PLAN		
LAYOUT, PROFILE & QUANTITIES		
BORING LOGS		
STAGE CONSTR. & WATER HANDLING		
STAGE CONSTR. & WATER HANDLING		
WINGWALL ELEVATIONS		
WINGWALL DETAILS - 1		
WINGWALL DETAILS - 2		
WINGWALL DETAILS - 3		
CULVERT DETAILS		
PAVED CHANNEL DETAILS		
METAL BRIDGE RAIL DETAILS		
PROTECTIVE FENCE DETAILS		
	INDEX OF DRAWINGS  GENERAL PLAN  LAYOUT, PROFILE & QUANTITIES  BORING LOGS  STAGE CONSTR. & WATER HANDLING  STAGE CONSTR. & WATER HANDLING  WINGWALL ELEVATIONS  WINGWALL DETAILS - 1  WINGWALL DETAILS - 2  WINGWALL DETAILS - 3  CULVERT DETAILS  PAVED CHANNEL DETAILS  METAL BRIDGE RAIL DETAILS	INDEX OF DRAWINGS  GENERAL PLAN  LAYOUT, PROFILE & QUANTITIES  BORING LOGS  STAGE CONSTR. & WATER HANDLING  STAGE CONSTR. & WATER HANDLING  WINGWALL ELEVATIONS  WINGWALL DETAILS - 1  WINGWALL DETAILS - 2  WINGWALL DETAILS - 3  CULVERT DETAILS  PAVED CHANNEL DETAILS  METAL BRIDGE RAIL DETAILS

DESIGNED BY:
GM2 ASSOCIATES, INC.
115 GLASTONBURY BLVD
GLASTONBURY
CT 06033

REV.	DATE	REVISION DESCRIPTION	SHEET NO.
Filenam	ne:		







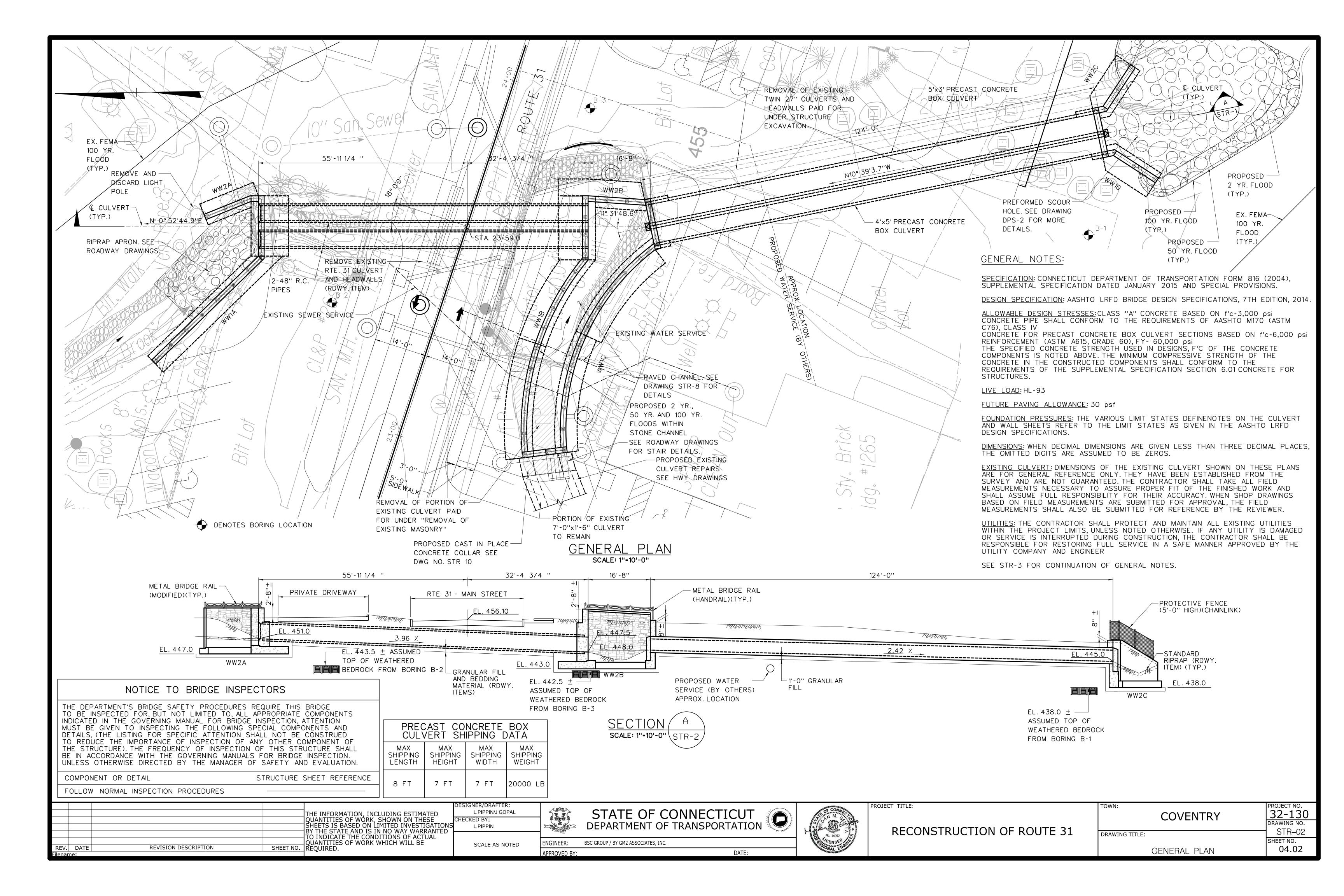
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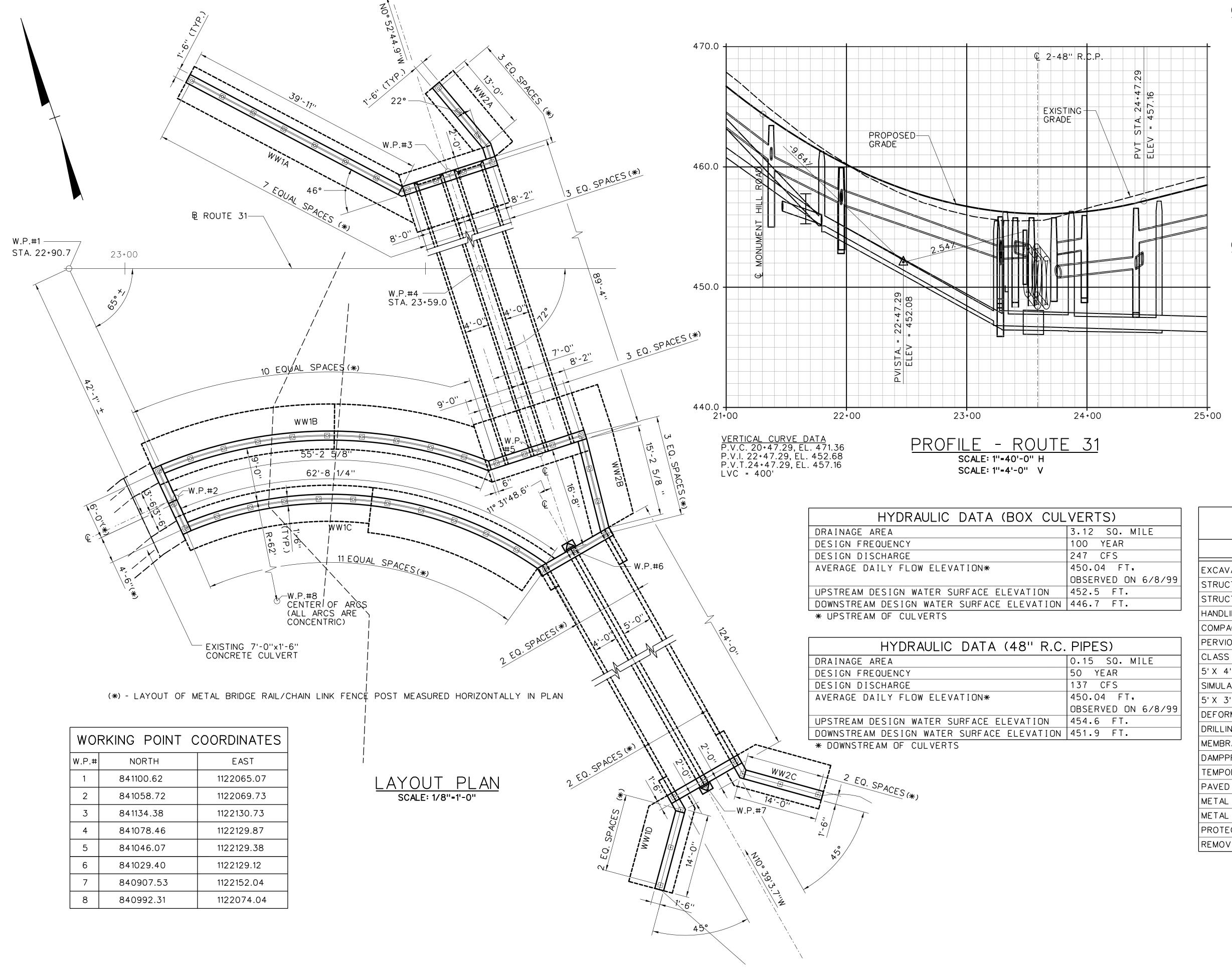
PROJECT TITLE:

RECONSTRUCTION OF ROUTE 31

COVENTRY

PROJECT NO.
32-130
DRAWING NO.
STR-01 SHEET NO. 04.01 INDEX OF DRAWINGS





#### GENERAL NOTES CONTD.

STAGED CONSTRUCTION: TRAFFIC SHALL BE MAINTAINED AT ALL TIMES IN ACCORDANCE WITH THE PROVISIONS FOR "MAINTENANCE AND PROTECTION OF TRAFFIC" AND "PROSECUTION AND PROGRESS". THE WORK WILL BE STAGED TO PROVIDE UNINTERRUPTED SERVICE FOR ROADWAY TRAFFIC ON ROUTE 31 AND TO MAINTAIN WATER FLOWS FOR MILL BROOK. THE INFORMATION SHOWN ON THE STAGED CONSTRUCTION AND WATER HANDLING, DRAWINGS STR-4 AND STR-5 DEPICTS "SUGGESTED METHODS OF CONSTRUCTION" AND IS INTENDED TO CONVEY THE ASSUMPTIONS MADE BY THE DESIGNER TO DEVELOP THE REQUIREMENTS FOR REGULATORY PERMITS INCLUDED WITH THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SELECTING MEANS AND METHODS FOR THE SAFE AND SUCCESSFUL COMPLETION OF CONSTRUCTION. PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL SUBMIT WORKING DRAWINGS TO THE ENGINEER FOR APPROVAL IN ACCORDANCE WITH ARTICLE 1.05.02. THESE DRAWINGS SHALL INCLUDE HIS PROPOSED METHODS OF CONSTRUCTION, INCLUDING BUT NOT LIMITED TO SEQUENCING AND COMPLETE DETAILS OF MATERIALS, METHODS AND EQUIPMENT TO BE USED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING REVISED PERMITS FROM ALL GOVERNING LOCAL, STATE AND FEDERAL AGENCIES DUE TO HIS PROPOSED CHANGES IN CONSTRUCTION METHODOLOGY, WHICH EFFECT ENVIRONMENTAL IMPACTS.

#### CONCRETE NOTES:

<u>CLASS "A" CONCRETE:</u> CLASS "A" CONCRETE SHALL BE USED FOR ALL CAST-IN-PLACE COMPONENTS.

JOINT SEAL: SEE SPECIAL PROVISIONS.

EXPOSED EDGES: EXPOSED EDGES OF CONCRETE SHALL BE BEVELED 1" X 1" UNLESS DIMENSIONED OTHERWISE.

<u>CONCRETE COVER:</u> ALL REINFORCEMENT SHALL HAVE 2'' COVER UNLESS DIMENSIONED OTHERWISE.

REINFORCEMENT: ALL REINFORCEMENT SHALL BE ASTM A615, GRADE 60 UNLESS NOTED OTHERWISE.

PREFORMED EXPANSION JOINT FILLER: THE COST OF FURNISHING AND INSTALLING PREFORMED EXPANSION JOINT FILLER SHALL BE INCLUDED IN THE COST OF THE ITEM "CLASS 'A' CONCRETE".

CONSTRUCTION JOINTS: CONSTRUCTION JOINTS, OTHER THAN THOSE SHOWN ON THE PLANS, WILL NOT BE PERMITTED WITHOUT PRIOR APPROVAL OF THE ENGINEER.

SIMULATED STONE MASONRY: SEE SPECIAL PROVISIONS

BRIDGE QUANTITIES		
ITEM	UNIT	TOTAL
EXCAVATION AND REUSE OF EXISTING CHANNEL BOTTOM MATERIAL	C.Y.	20
STRUCTURE EXCAVATION - EARTH (COMPLETE)	C.Y	1545
STRUCTURE EXCAVATION - ROCK (COMPLETE)	C.Y	45
HANDLING WATER	L.S.	1
COMPACTED GRANULAR FILL	C.Y.	220
PERVIOUS STRUCTURE BACKFILL	C.Y.	1370
CLASS "A" CONCRETE	C.Y.	320
5'X 4'PRECAST CONCRETE BOX CULVERT	L.F.	124
SIMULATED STONE MASONRY	S.Y.	280
5'X 3'PRECAST CONCRETE BOX CULVERT	L.F.	124
DEFORMED STEEL BARS	Lbs	35000
PRILLING HOLES AND GROUTING DOWELS	EA.	28
MEMBRANE WATERPROOFING (WOVEN GLASS FABRIC)	S.Y.	202
)AMPPROOFING	S.Y.	255
TEMPORARY EARTH RETAINING SYSTEM	S.F.	756
PAVED CHANNEL	S.Y.	85
METAL BRIDGE RAIL (MODIFIED)	L.F.	75
METAL BRIDGE RAIL (HANDRAIL)	L.F.	173
PROTECTIVE FENCE (5'-0" HIGH)	L.F.	44
REMOVAL OF EXISTING MASONRY	C.Y.	35

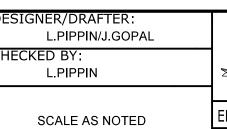
THE INFORMATION, INCLUDING OUANTITIES OF WORK, SHOW	G ESTIMATED  DESIGNER/DRAFTER:  L.PIPPIN/J.GOPAL		STATE OF CONNECTICUT	M. O. CONN.	PROJECT TITLE:	TOWN: COVENTRY	PROJECT NO.  32-130  DRAWING NO.
SHEETS IS BASED ON LIMITE BY THE STATE AND IS IN NO	D INVESTIGATIONS L.PIPPIN WAY WARRANTED	TRANSTUIT	DEPARTMENT OF TRANSPORTATION	A X	RECONSTRUCTION OF ROUTE 31	DRAWING TITLE:	drawing no. STR-03
REV. DATE REVISION DESCRIPTION SHEET NO. REQUIRED.	S OF ACTUAL   WILL BE   SCALE AS NOTED	ENGINEER:	BSC GROUP / BY GM2 ASSOCIATES, INC.	No. 14052  CENSED  NO. 14052  CENSED  NO. 14052			SHEET NO.
Filename:		APPROVED BY:	DATE:	TALL STREET, S		LAYOUT, PROFILE & QUANTITIES	04.03

Driller	200	M. McDonough				DOT Boring	g Report	Hole No.: B-1		10000 COO
Inspe	15.35.5	R. Pion	Town			VENTRY	Stat./Offset:24+0		Rt	
Engin		R. Pion	Projec		27 =	130		Northing: 8409		
		11/20/2006	Route					Easting: 1122		
2) 03/24/20/20/20/20	O HISTORY SERVICE	11/20/2006	Bridge					Surface Elevation	n: 451.4	
		ription: Route 31					•			
SOUR A	C24-314-310	Type: 4" HW	-0/17/20	144	124 O. N.	Size:SS 1 3/8	tipul e	Core Barrel Type	:2" NX	
		300 lbs Fall:24"				0 lbs Fall: 3			Local Control	
Grour	nawater	r Observations @ SAMPLES	24	after	U	hours, @	after ho	ours, @ after	hours	
t)				=		Generalized Strata Description	Mat	terial Description		Elevation (ft)
Depth (ft)	Sample Type/No	Blows on	Pen. (in.)	Rec. (in.)	RQD %	a srip	20220			tįo
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4										-
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10 -	S-2	25 25 27 26	24	44				AND, and f to c GRAV	EL, trace	-
		25 25 27 26	24	11			silt, with cobble	es	322 0 344	440
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						WEATHERED				-
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-	C-1		60	60	46	BEDROCK	schist	ely fractured slightly w	eathered	- 435
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00										-
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25 -							Bottom of Boring			7-
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	Penetra		NC	IES:			eathered roc	K WITH	She 1 of	
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No. of	f Samp	les:2							SM-001-M F	REV. 1/0

Drille:	2052	M. M		nou	ign	-				DOT Borin	g Report	Hole No.: B-2	20.00.01	C)
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	eer:	R. Pi		00		+		ct No		130		Northing: 8411		
	Date:	1100				_		No.:					2110	
	Date				to 0			e No.		aante		Surface Elevatio	n: 456.1	
	ct Des	10.7				1		11.5			3 * *	0 - 5	0".112	
	g Size									Size:SS 1 3/8		Core Barrel Type	e:2" NX	
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$\widehat{}$						- 7				Zec	Ma	terial Description		# # ·
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0 7										PAVEMENT	İ			
										STRUCTURE	1			- 455
										GLACIAL TILL				
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-	S-3	146	3				6	4		GLACIAL	some silt, with		aria,	- 445
	(									TILL				i <del>-</del>
										WEATHERED BEDROCK	Brown c to f G some silt, with	RAVEL, some f to c s	and,	1000
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20 -														F
-	C-2	-					60	60	38		Grav slightly w	eathered highly fracti	ured	- 435
-							100000000000000000000000000000000000000				schist			-
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25 -														
20 -											<u></u>			430
_											\Bottom of Boring			430
								10						
	5	Samp	le Ty	/pe:	S	=Sp	olit S	poon	C=C	Core UP = U	ndisturbed Pis	ston V = Vane Sh	ear Test	
	Pro	oporti	ons	Use	ed:	Tra	ice =	1 - 1	0%,	Little = 10 -	20%, Some	= 20 - 35%, An	d = 35 - 5	60%
Total	Penet	ration	in				NC	TES	: Drill	ed through v	veathered roc	k with roller bit		eet
Earth	:16	Roc	k: 10	)					from	12 to 16 fe	et.		1 0	f 1
No. o	f Sam	ples:	3										SM 004 M	DEV 4/6
			=1										SM-001-M	NEV. 1/0

Driller	:	M. N	lcDo	ono	ugh	1	Co	nnec	ticut	DOT Boring	g Report	Hole No.: B-3		-
Inspe		R. P				-	own:			VENTRY		Stat./Offset:23+		t.
Engin		R. P	_	100		+		ct No.		130		Northing: 841		
	Date: Date:					_		No.: No.				Easting: 1122 Surface Elevation	2161 n: 456 1	
	ct Des				te 31		573			nents		Surface Lievatio	11. 430.1	
	g Size	11.5				_				Size:SS 1 3/8	in	Core Barrel Type	e:NX	
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		_	S	AMP	LES		_			on ced	Ma	torial Description		(ft)
Depth (ft)	Sample Type/No		Sa	ows amp			Pen. (in.)	Rec. (in.)	RQD %	Generalized Strata Description	IVIa	terial Description and Notes		Elevation (ft)
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0 -										PAVEMENT STRUCTURE/ GLACIAL TILL				455
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10 -	S-2	10	9	10	11		24	14			Gray f to c SA silt	ND, and f to c GRAV	EL, trace	- - 44
15 -	\S-3 C-1	50					0	0 48	0	WEATHERED BEDROCK BEDROCK	schist	ely fractured slightly v	veathered	- - - 440
20 -											Core times (ir	min/ft): 5,5,5,7,7		
-	C-2						60	60	45		schist	ely fractured slightly v min/ft): 8,8,8,7,8	veathered	- 435 - -
25 -														=
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Total	Penet	V. N.					1			ar whom in he had	weathered ro	Dell See	1	eet
Earth:		Roc		0			10	ILU.	2 22 22	to 16 feet		OK II OIII	1 of	
No of	f Sam	oles::	3				1						SM-001-M	DEV. 410

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-	-	-	•	THE INFORMATION, INCLUDING ESTIMATED	
-	-		-		CHEC
-	-			SHEETS IS BASED ON LIMITED INVESTIGATIONS	
-	-		-	BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE THE CONDITIONS OF ACTUAL	
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REV.	DATE	REVISION DESCRIPTION	SHEET NO.	REQUIRED.	
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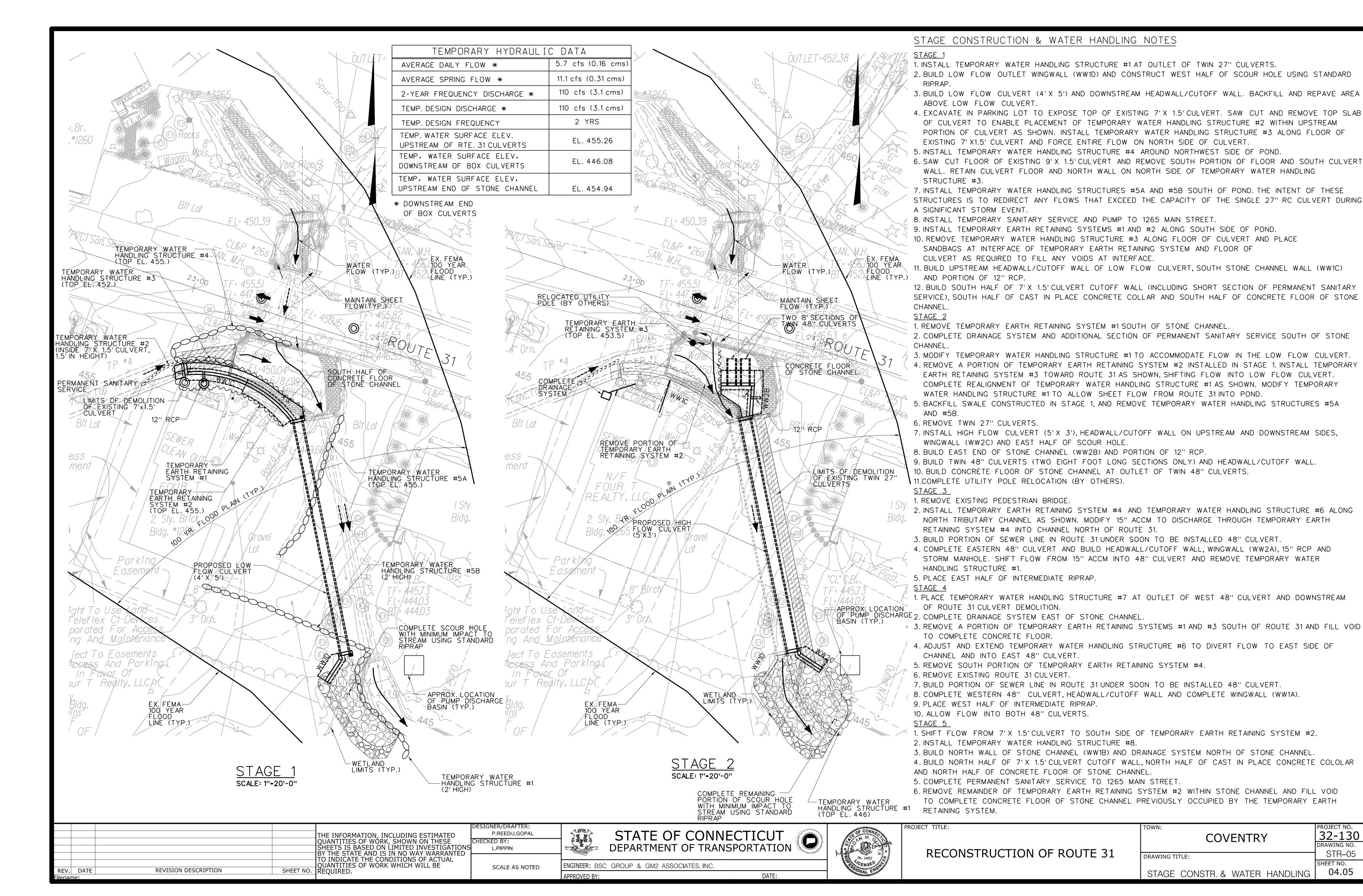


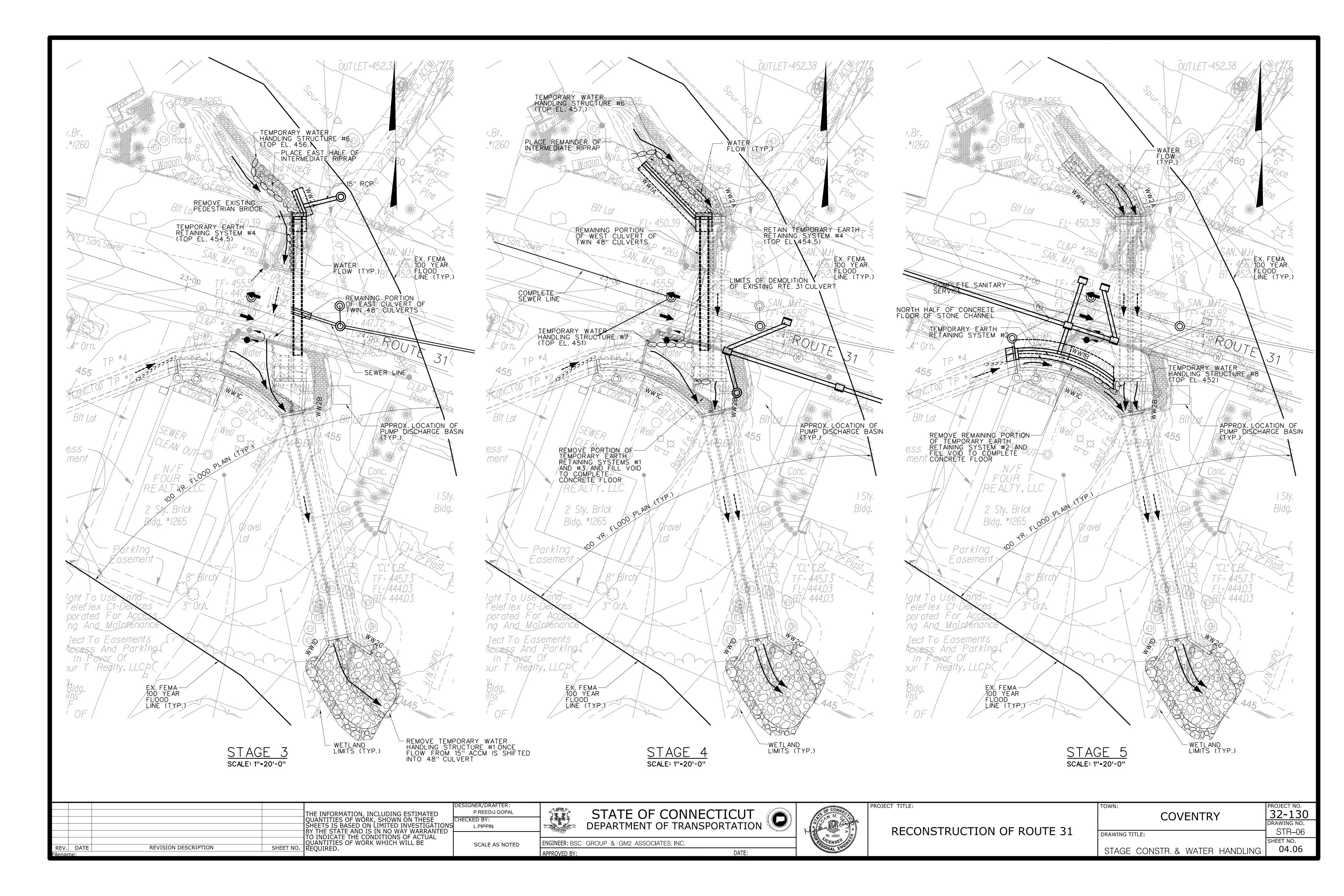
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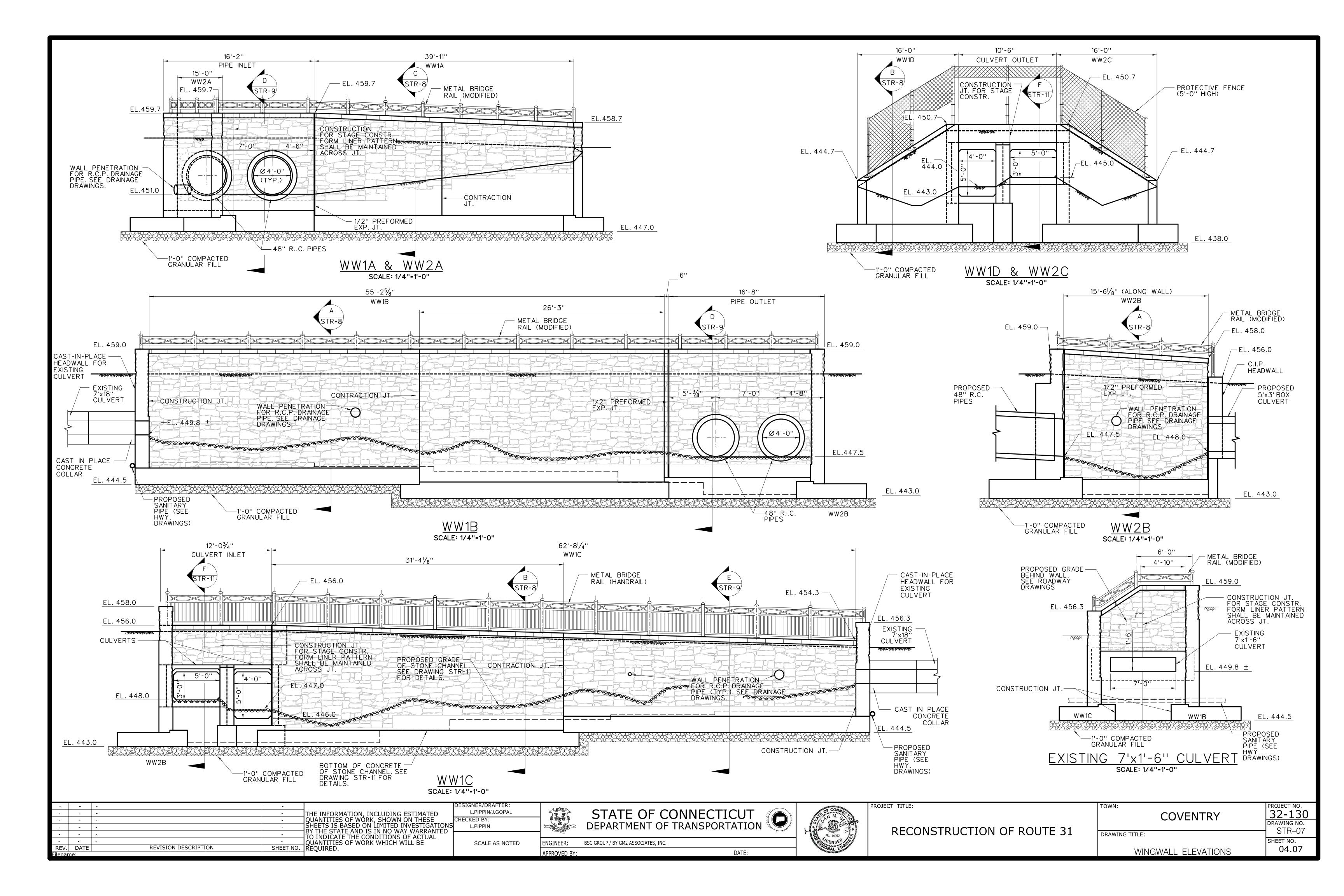


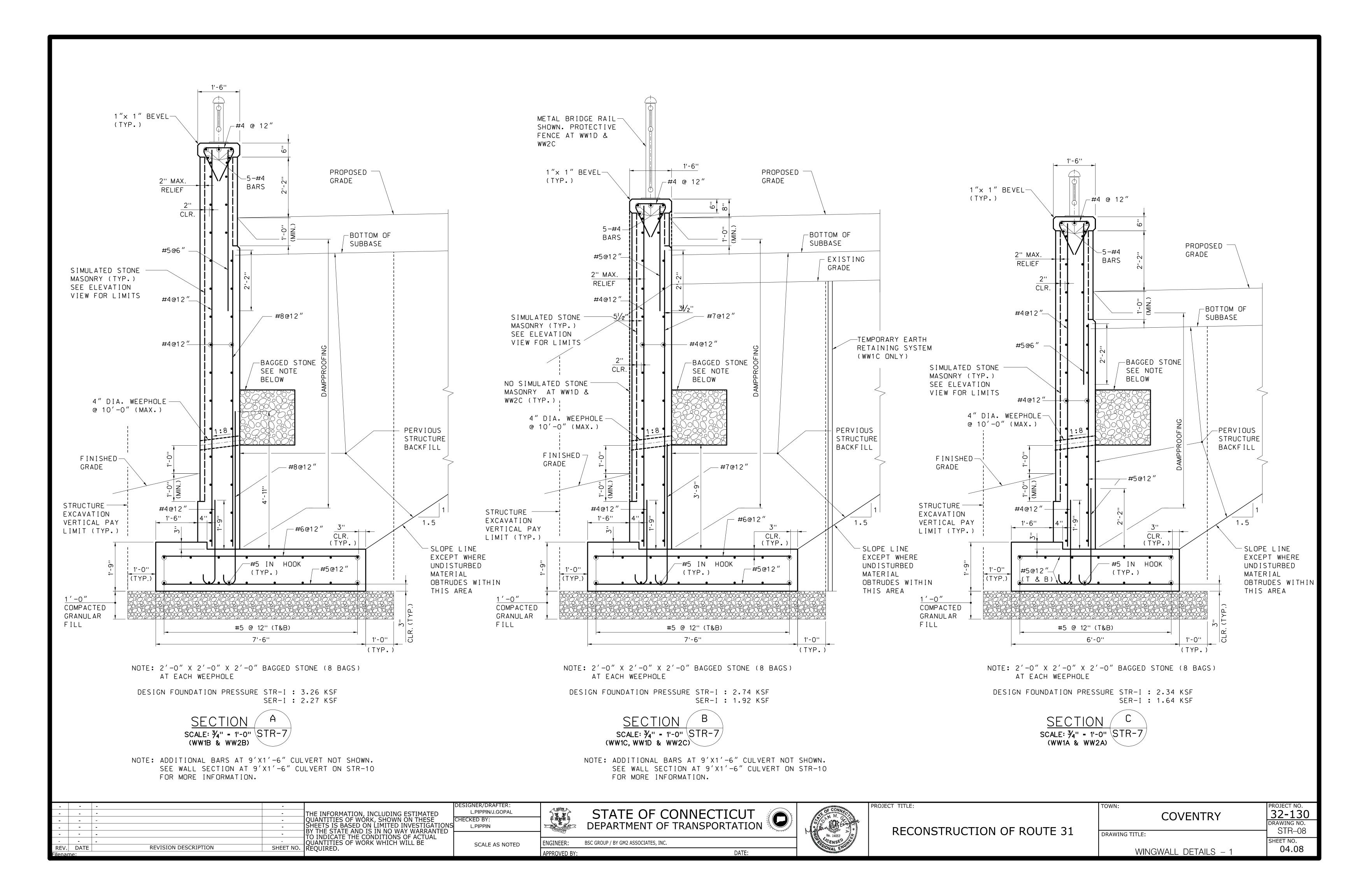
RECONSTRUCTION	OF ROUTE 31

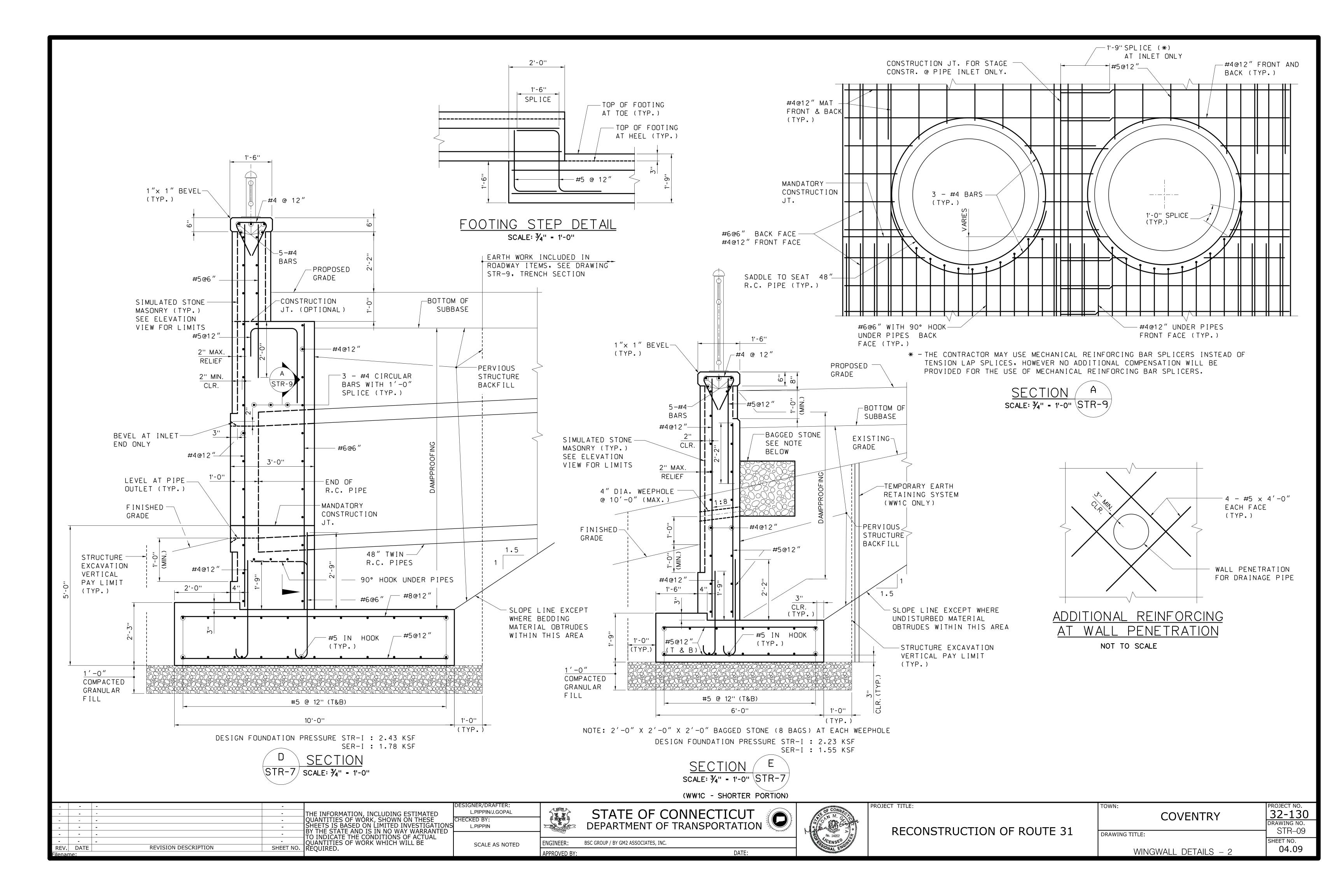
TOWN:	COVE	ENTRY	PROJECT NO. <b>32-130</b>
DRAWING TITLE:			drawing no. STR–04
	BORING	LOGS	SHEET NO. 04.04

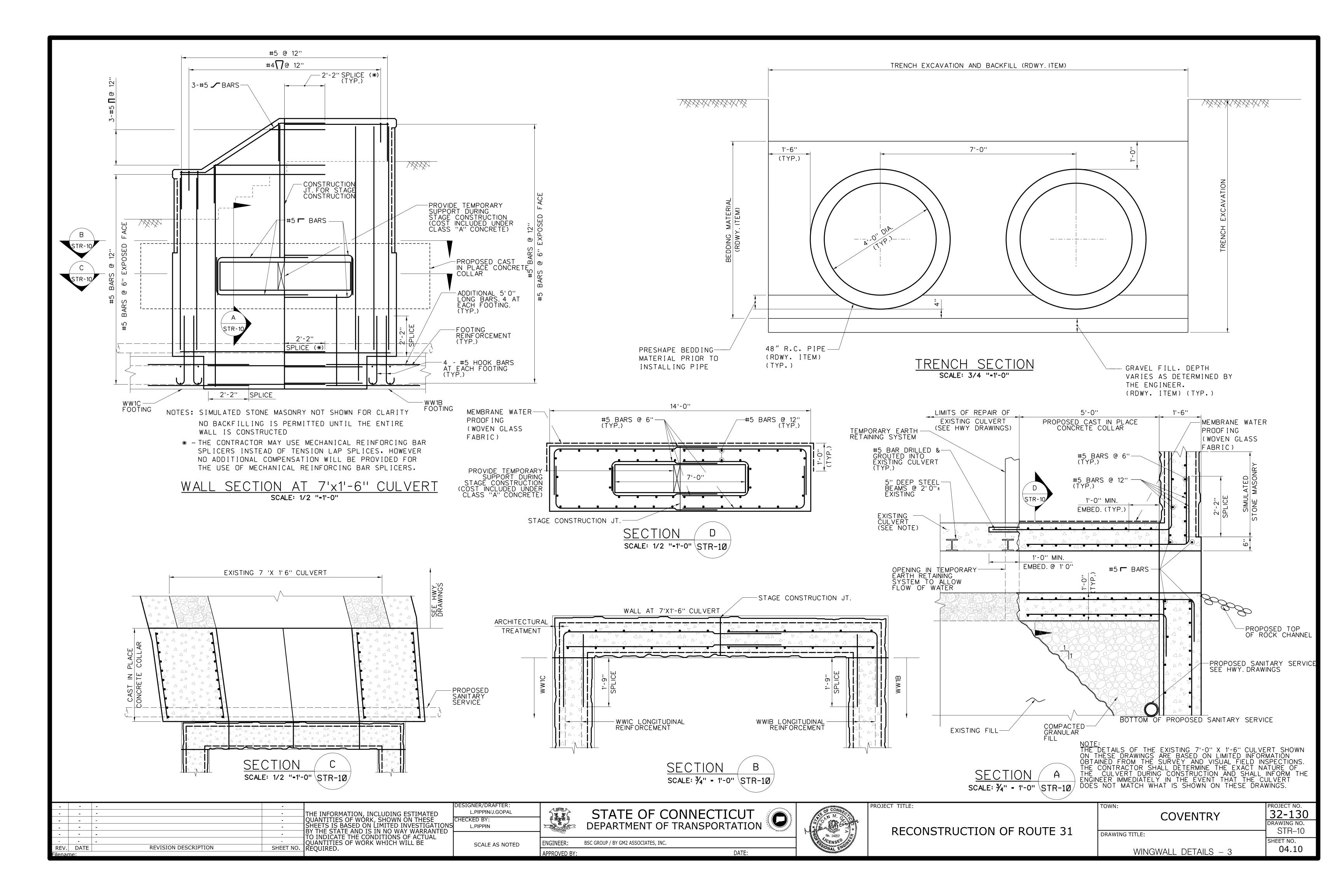


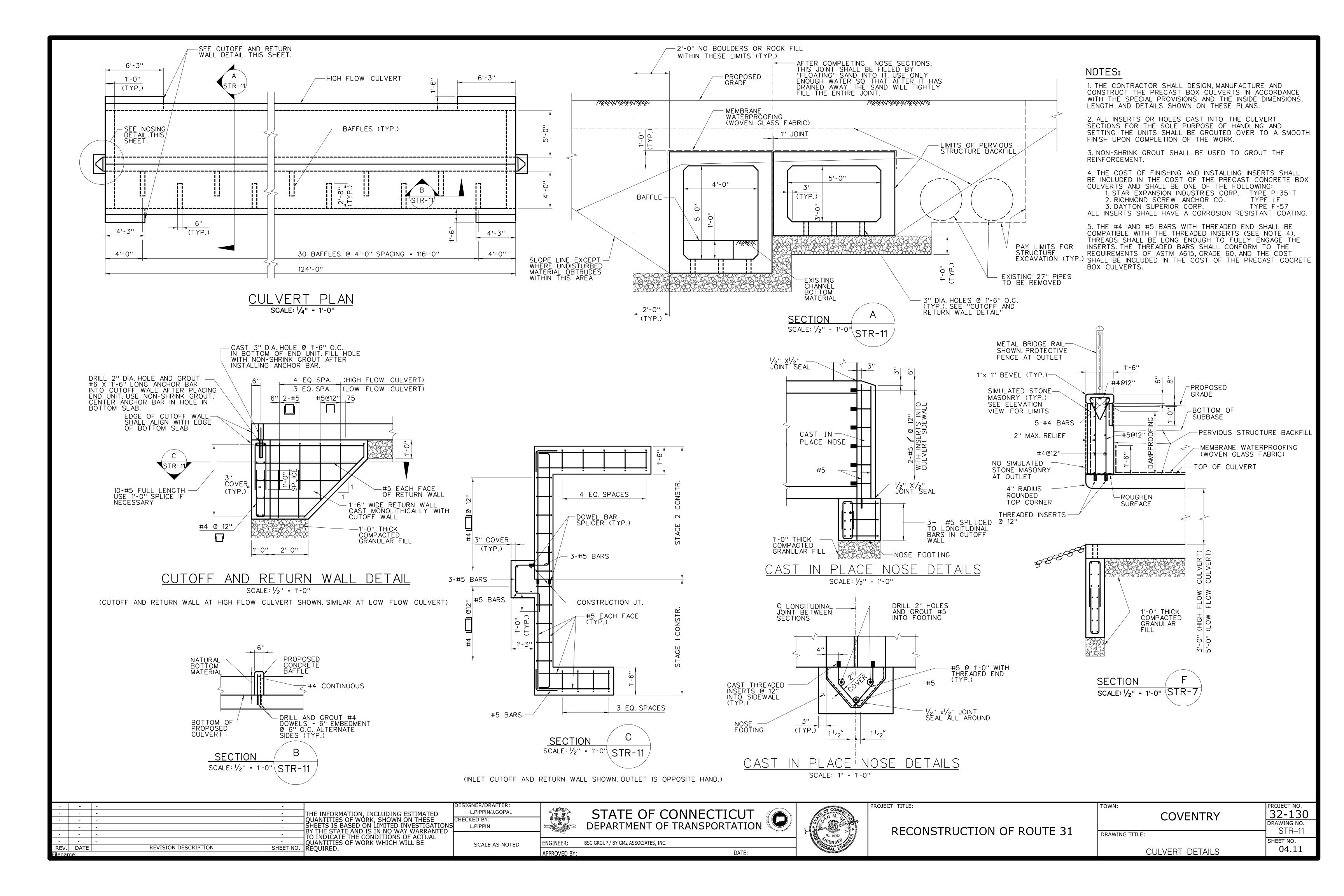


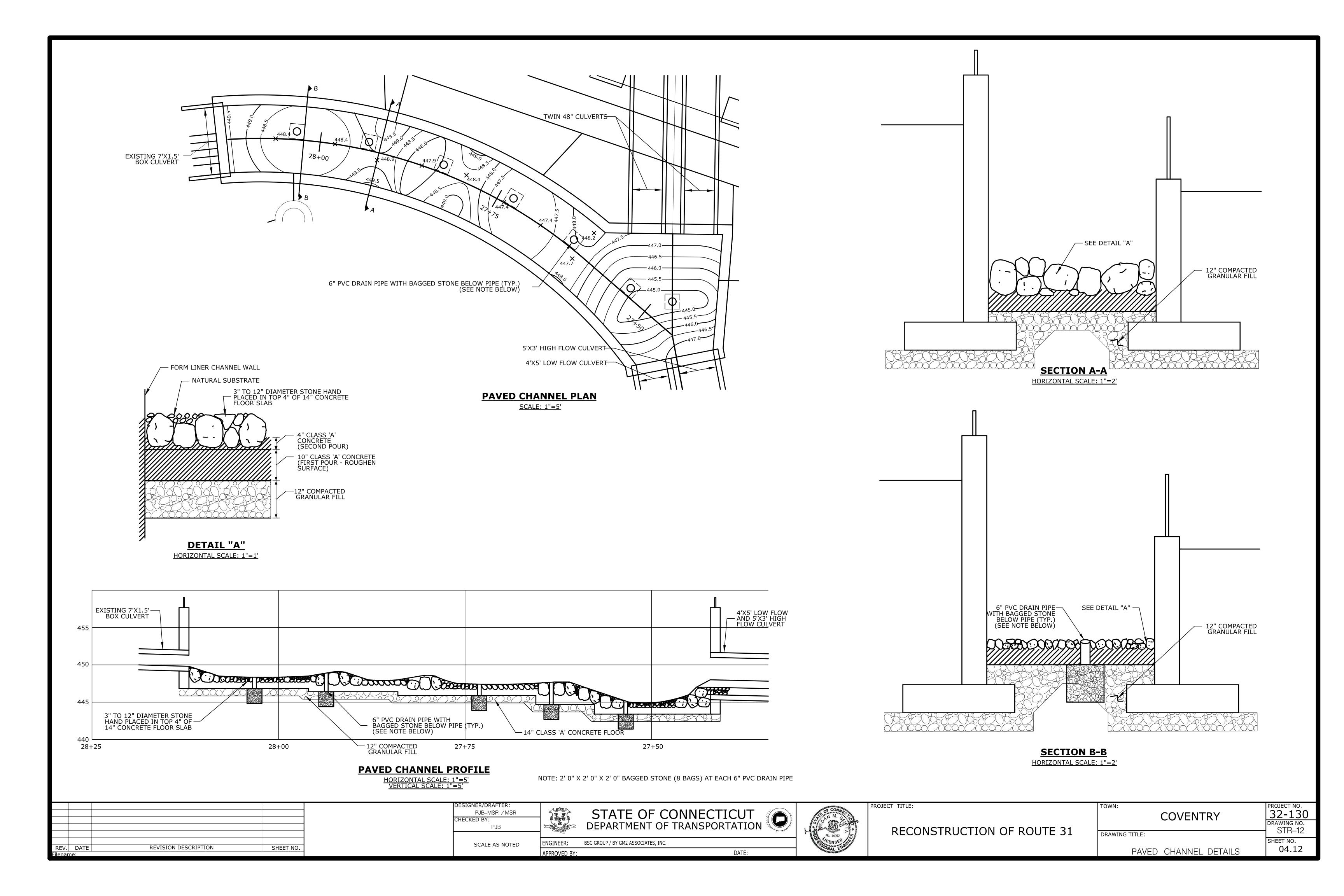


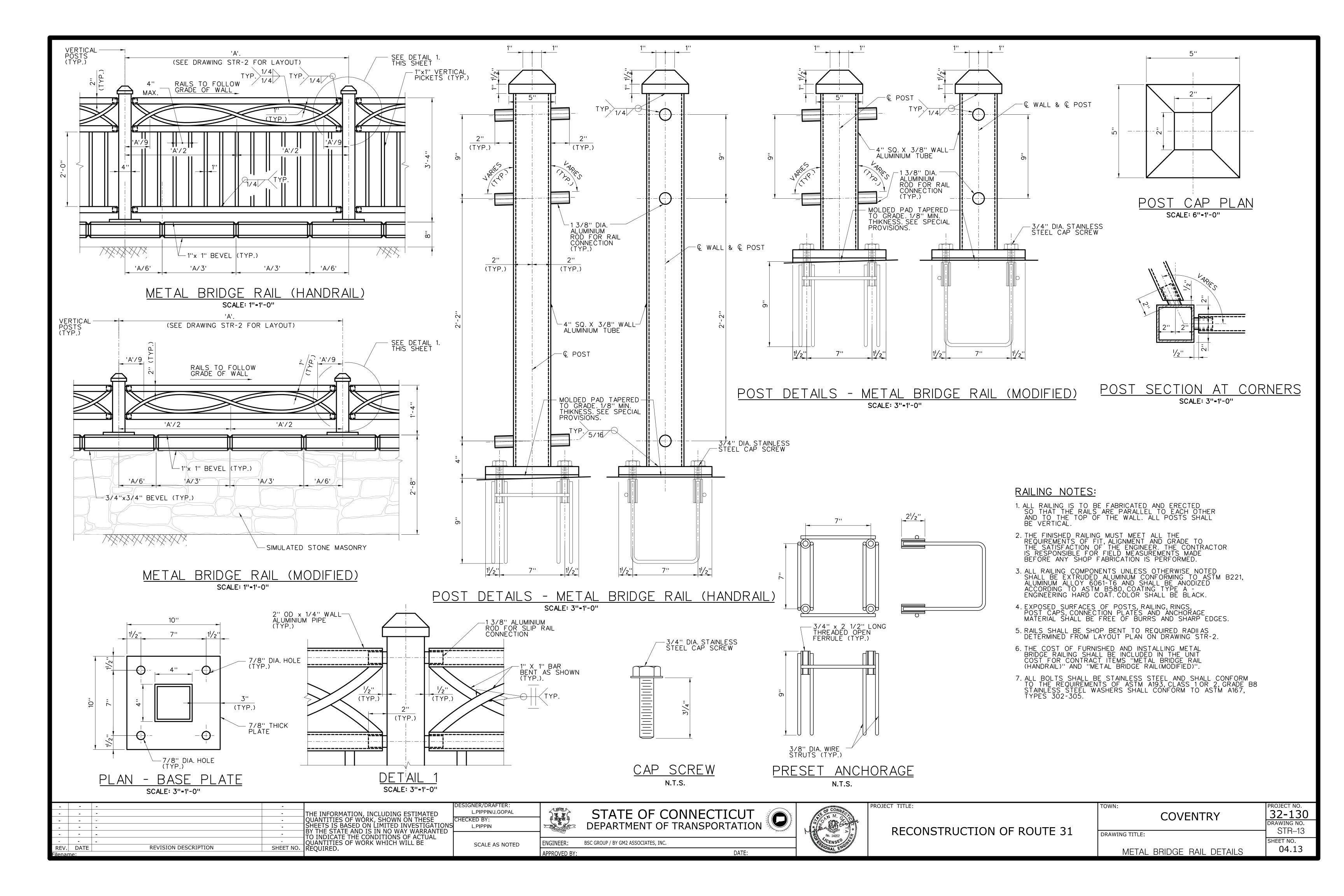


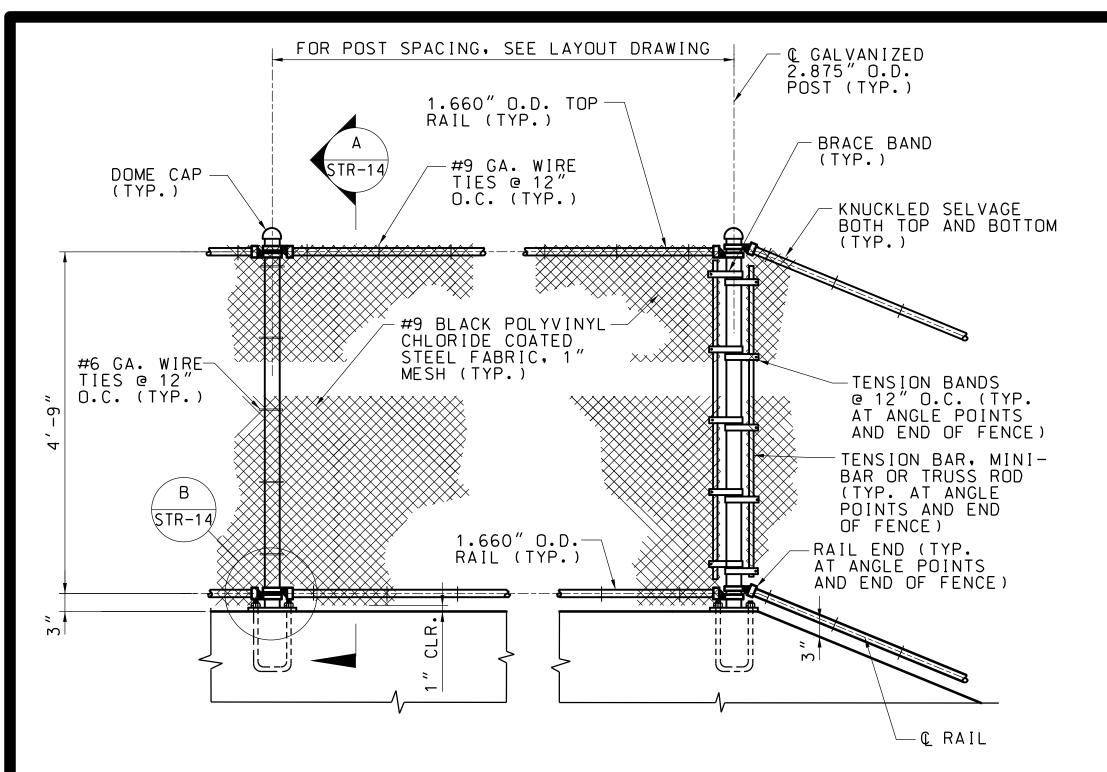




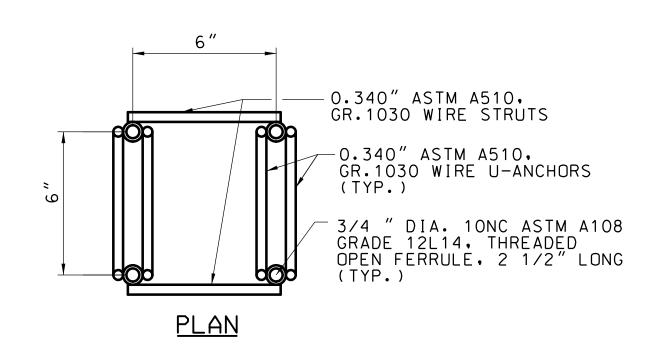


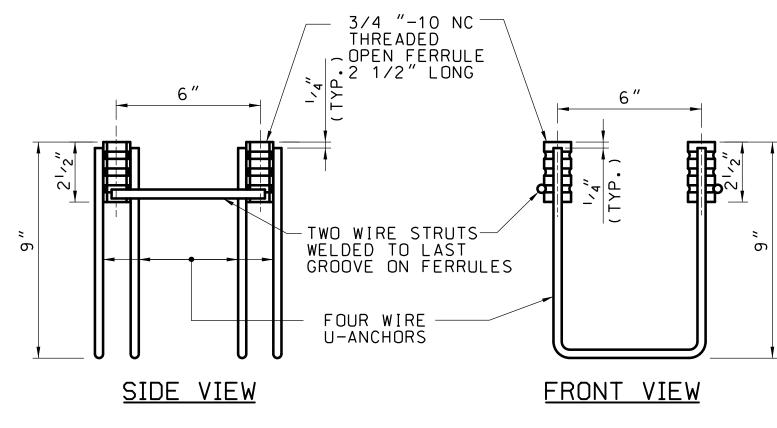




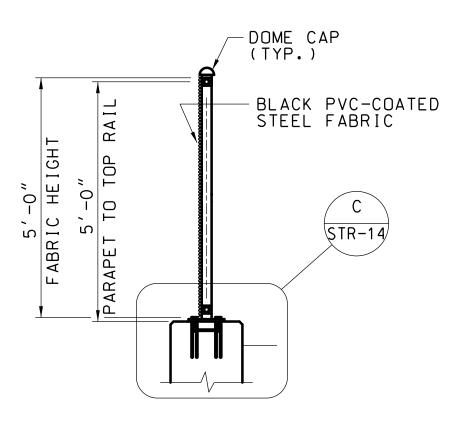


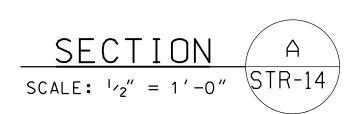
### ELEVATION - PROTECTIVE FENCE (5' HIGH) SCALE: $3_{4}'' = 1' - 0''$

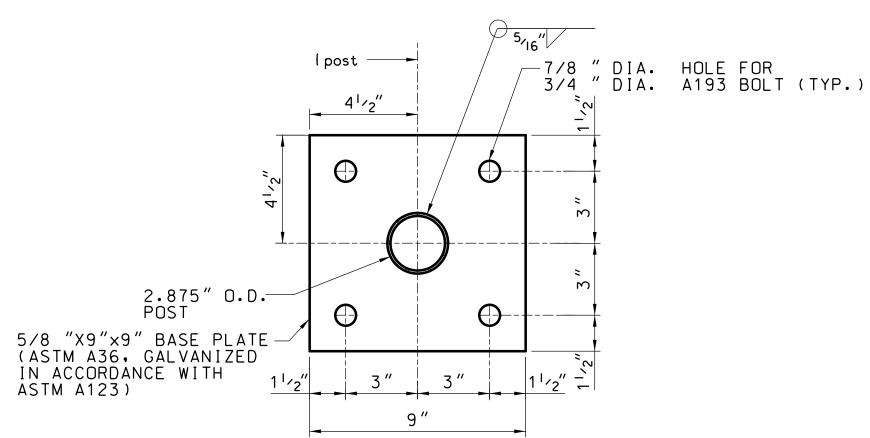




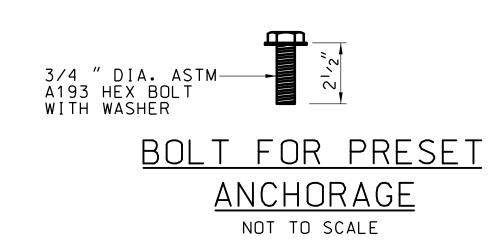
ANCHORAGE DETAILS SCALE: 3'' = 1' - 0''







NOTE:
PRESET ANCHORAGE ASSEMBLIES
SHALL BE HOT-DIP GALVANIZED
AFTER FABRICATION. BASE PLATE DETAIL-B SCALE: 3'' = 1' - 0''



BSC GROUP / BY GM2 ASSOCIATES, INC.

## <u>NOTES</u>

ALL POSTS SHALL BE INSTALLED PLUMB.

ALL RAILS SHALL BE PARALLEL TO THE TOP OF THE PARAPET.

CHAINLINK FENCE FABRIC SHALL BE #9 GAGE STEEL WIRE, GALVANIZED AND PVC-COATED AND WOVEN INTO A 1" MESH. THE COLOR SHALL BE BLACK. PVC COATING SHALL BE CLASS 2B, THERMALLY FUSED AND BONDED.

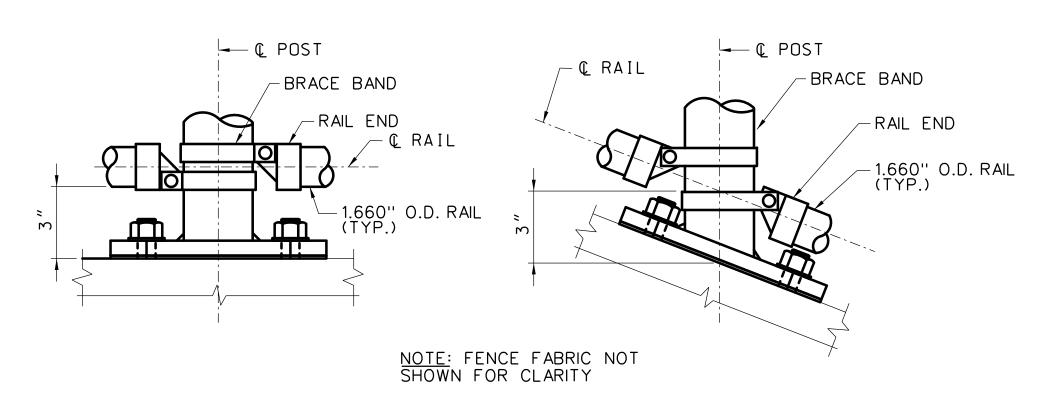
STEEL POSTS AND RAILS SHALL CONFORM TO THE REQUIREMENTS OF ASTM A53, TYPE E OR S, GRADE B. THE STEEL POSTS, RAILS AND BASE PLATES SHALL BE HOT-DIP GALVANIZED AFTER FABRICATION. NO WELDING SHALL BE PERFORMED AFTER GALVANIZING.

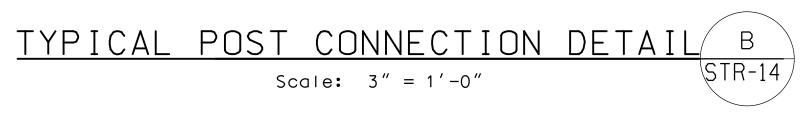
ANCHOR BOLTS SHALL CONFORM TO THE REQUIREMENTS OF ASTM F593, GROUP 1 (AISITYPE 304). NUTS SHALL CONFORM TO THE REQUIREMENTS OF ASTM F594, GROUP 1, AND CIRCULAR WASHERS SHALL CONFORM TO THE REQUIREMENTS OF ASTM A167, TYPES 302 TO 305.

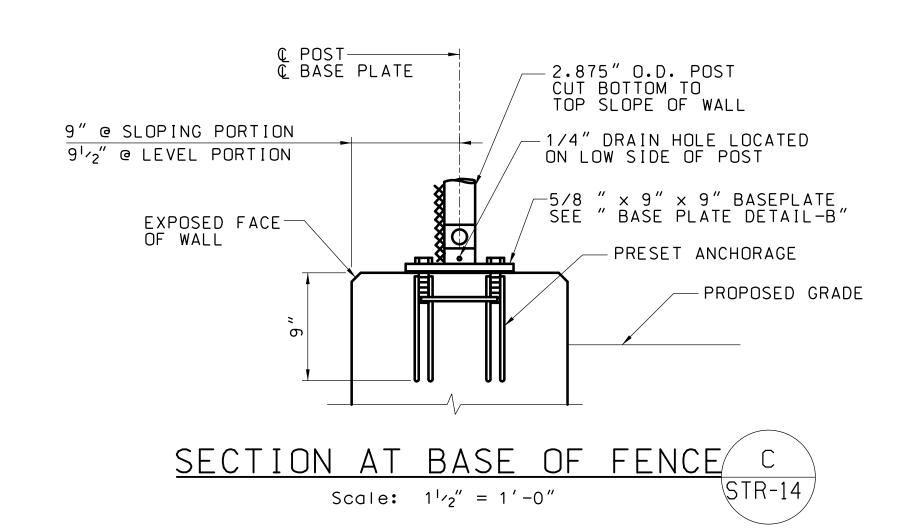
THE LENGTH OF FENCE FOR PAYMENT SHALL BE THE ACTUAL NUMBER OF LINEAR FEET OF CHAIN LINK FENCE, INSTALLED AND ACCEPTED, MEASURED HORIZONTALLY BETWEEN POSTS WITHIN THE LIMITS SHOWN ON PLANS. IT WILL BE PAID FOR UNDER THE ITEM "PROTECTIVE FENCE (5' HIGH)".

MOLDED PADS SHALL BE MANUFACTURED FROM NEW UNVULCANIZED ELASTOMER AND UNUSED SYNTHETIC FIBERS.

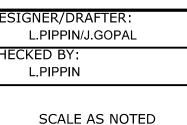
FOR ADDITIONAL INFORMATION, SEE SPECIAL PROVISION "PROTECTIVE FENCE (5' HIGH)".







-	-	-	-	
-	-	-	•	THE INFORMATION, INCLUDING ESTIMATED
-	-	-		QUANTITIES OF WÓRK, SHOWN ON THESE
-	-	-		SHEETS IS BASED ON LIMITED INVESTIGATION
-	-	-	•	BY THE STATE AND IS IN NO WAY WARRANTED  TO INDICATE THE CONDITIONS OF ACTUAL
-	-	-	-	OUANTITIES OF WORK WHICH WILL BE
REV.	DATE	REVISION DESCRIPTION	SHEET NO.	REQUIRED.

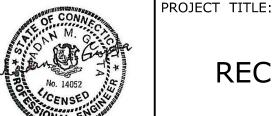


ENGINEER:





DATE:



**RECONSTRUCTION OF ROUTE 31** 

TOWN:	COVENTRY	
DRAWING TITLE:		

PROTECTIVE FENCE DETAILS

PROJECT NO. **32-130** 

DRAWING NO. STR-14

04.14

SHEET NO.